REMARKS

Status of case

Claims 1-20 are currently pending in this case. Claims 1, 7, 13, 14, 16, and 20 are independent claims

Rejection Under 35 U.S.C. §103:

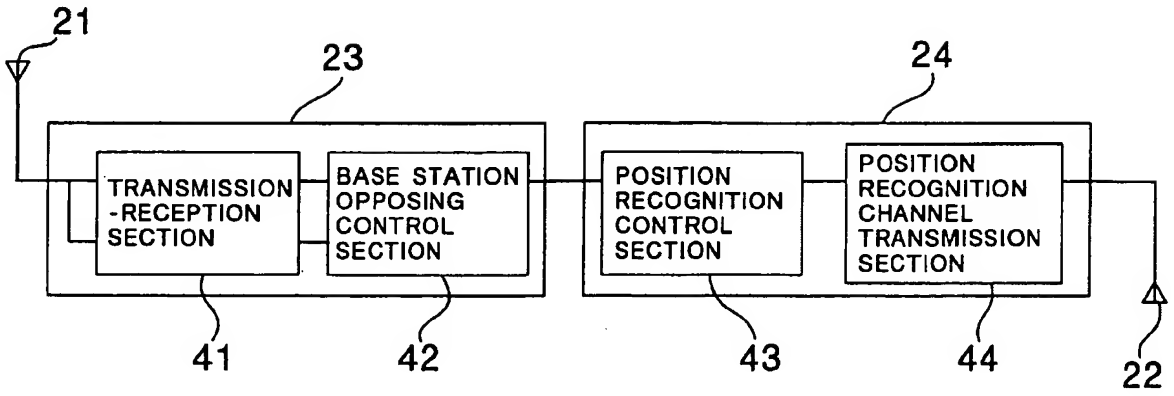
Claims 1-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,970,408 (Carlsson et al.) in view of U.S. Patent 6,272,344 (Kojima). The Office Action stated that the Carlsson reference teaches all of the limitations in independent claims 1, 7, 13, 14, and 16 except for the traveling storage unit, including scheduled path information and scheduled time information, and the control station, specifying the present area of the mobile terminal based on the information in the traveling storage unit.

The Office Action stated that the Kojima reference teaches the remaining limitations including:

> the traveling schedule storage unit for storing a scheduled path information indicating one or more base station units through which a moving object accompanied by one or more of the communication terminals passes, (see Fig. 1 and col. 7, lines 41-53)
>
> a scheduled time information indicating a scheduled time of the moving of the moving object, (see col. 7, lines 41-53)
>
> a control station which, when the portable communication terminal is moving with the moving object (see Abstract, Fig. 2, portable communication terminals 27-29 moving with the moving object 9) specifies a present area information indicating a base station area within which the moving object is predicted to be located based on the current time, the scheduled path information, and the scheduled time information stored in the traveling schedule storage unit. (see col. 8, lines 26-36).

Applicants respectfully disagree that the Kojima reference teaches the traveling schedule storage unit limitations or the control station limitations. The Kojima reference teaches a position registration system for mobile stations on a mobile space, such as an electric train or bus. See Abstract. A mobile station which enters the mobile space receives As the mobile space moves, its position is tracked by the base station opposing transmission-reception apparatus 23. In particular, Kojima teaches "when the mobile space 9 moves in the real space and enters another service area, the base station opposing registration reception apparatus 23 performs a position registration operation." Col. 4, lines 52-55. FIG. 4 shows an diagram of the base station opposing registration reception apparatus 23:

FIG.4



As shown in FIG. 4, the tracking of the mobile space is not based in any way on the travel schedule of the mobile space. Rather, the tracking of the mobile station is performed solely based on the movement of the mobile space.

In contrast, the independent claims recite the following limitations:

Claim 1: a traveling schedule storage unit for storing a scheduled path information indicating a scheduled path of a moving object and a scheduled time information indicating a scheduled time of the movement of the moving object

a control unit for . . . changing the presence area information of the portable communication terminal stored in the presence area storage unit based on the current time, the scheduled path information, and the scheduled time information stored in the traveling schedule storage unit

Claim 7: a traveling schedule storage unit for storing a scheduled path information indicating a scheduled path of a moving object and a scheduled time information indicating a scheduled time of the movement of the moving object;

a control unit for . . . specifying a location of the moving object based on the current time, the scheduled path information and the scheduled time information in the traveling schedule storage unit

Claim 13: changing the presence area information of the portable communication terminal moving with a moving object based on the current time, a scheduled path of the moving object, and a traveling schedule of the moving object

Claim 14: a traveling schedule storage unit for storing a scheduled path information indicating one or more base station areas through which a moving object accompanied by one or more said portable communication terminals passes, and a scheduled time information indicating a scheduled time of the movement of the moving object

a control station which . . . specifies a present area information indicating a base station area within which the moving object is predicted to be located based on

the current time, the scheduled path information, and the scheduled time information stored in the traveling schedule storage unit

Claim 16: a traveling schedule storage unit for storing a scheduled path information indicating one or more base station areas through which the moving object passes, and a scheduled time information indicating the scheduled time of the movement of the moving object

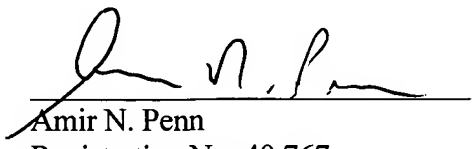
a control station that . . . specifies the presence area of the portable communication terminal based on the current time, the scheduled path information, and the scheduled time information of the moving object with the identification information

As shown above, the Kojima reference wholly fails to teach or even suggest any travel schedule information (such as the scheduled path information and/or scheduled time information), and also fails to teach or even suggest a control station that specifies the presence area of the portable communication terminal based on the travel schedule information. Rather, Kojima merely teaches that the mobile space 9 is tracked as the mobile space 9 moves. The present invention is thus significantly different from the teachings of Kojima. Kojima teaches a reactive system, where the position is determined based after the movement has occurred. In stark contrast, the present invention claims a proactive system, which determines the position based on anticipated, scheduled travel information such as the scheduled path information and/or scheduled time information. Therefore, each of the claims is patentable over the cited references.

SUMMARY

Applicants submit that based on the foregoing remarks, the rejections have been traversed, and that the claims are in condition for allowance. Should there be any remaining formalities, the Examiner is invited to contact the undersigned attorneys for the Applicants via telephone if such communication would expedite this application.

Respectfully submitted,



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